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APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY.DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/606,009	06/25/2003	2857	974	1031.16081-CON	8	42	9

**CONFIRMATION NO. 5727**

**FILING RECEIPT**



\*OC000000010895534\*

Daniel D. Ryan  
 RYAN KROMHOLZ & MANION, S.C.  
 Suite 1900  
 633 West Wisconsin Avenue  
 Milwaukee, WI 53203

Date Mailed: 09/22/2003

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

**Applicant(s)**

Robert N. Blumenthal, Brookfield, WI;  
 Andreas T. Melville, Brookfield, WI;

**Assignment For Published Patent Application**

Furnace Control Corp.;

**Domestic Priority data as claimed by applicant**

This application is a CON of 09/252,158 02/18/1999 PAT 6,591,215

**Foreign Applications**

If Required, Foreign Filing License Granted: 09/16/2003

Projected Publication Date: 12/25/2003

Non-Publication Request: No

Early Publication Request: No

**\*\* SMALL ENTITY \*\***

Title

Systems and methods for controlling the activity of carbon in heat treating atmospheres

**Preliminary Class**

702

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**LICENSE FOR FOREIGN FILING UNDER  
Title 35, United States Code, Section 184  
Title 37, Code of Federal Regulations, 5.11 & 5.15**

**GRANTED**

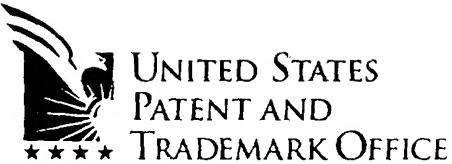
The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

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No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).



Under Secretary of Commerce for Intellectual Property and  
Director of the United States Patent and Trademark Office  
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## NOTICE OF FINAL RULEMAKING

### PATENT FEE REVISIONS

The United States Patent and Trademark Office (USPTO) has amended the rules of practice in patent cases to adjust certain patent fee amounts to reflect fluctuations in the Consumer Price Index (CPI).

A notice was published in the *Federal Register* on July 14, 2003, and in the *Official Gazette of the United States Patent and Trademark Office* on August 5, 2003.

**Any fee amount paid on or after October 1, 2003, is subject to the new fee schedule.**

**This notice does not affect trademark fees.**

Legislation has been introduced in the Congress that would alter our fees. Customers should be aware that legislative changes to our fees would supersede this fee schedule. If such changes occur, we will make corresponding rule changes by publication in the *Federal Register*. Official notices of any fee changes will appear in the *Federal Register* and the *Official Gazette of the United States Patent and Trademark Office*.

The fee schedule is available on our Web site at [www.uspto.gov](http://www.uspto.gov). The most up-to-date fee amounts and information are also available on our Web site. Any future changes to the fees will be posted to the Web site. If you have any questions related to patents and trademarks, please contact the General Information Services Division at (703) 308-4357 or (800) 786-9199, or by fax at (703) 305-7786.

A handwritten signature in black ink that reads "Jo-Anne Barnard".

Jo-Anne Barnard  
Chief Financial Officer and  
Chief Administrative Officer

<b>Fee Code</b>	<b>37 CFR</b>	<b>Description</b>	<b>Fee</b>
<b><u>Patent Service Fees</u></b>			
8001	1.19(a)(1)	Printed copy of patent w/o color, delivery by USPS, USPTO Box, or electronic means	3.00
8003	1.19(a)(2)	Printed copy of plant patent in color .....	15.00
8004	1.19(a)(3)	Color copy of patent (other than plant patent) or SIR containing a color drawing .....	25.00
8005	1.19(a)(1)	Patent Application Publication (PAP) .....	3.00
8007	1.19(b)(1)	Certified copy of patent application as filed .....	20.00
8008	1.19(b)(2)(i)	Copy of patent-related file wrapper and paper contents of 400 or fewer pages .....	200.00
8009	1.19(b)(2)(ii)	Additional fee for each additional 100 pages or portion thereof.....	40.00
8010	1.19(b)(2)(iii)	Additional fee for certification of patent-related file wrapper and paper contents .....	25.00
8011	1.19(b)(3)(i)	Copy of first compact disk in a single order of file wrapper and paper contents .....	55.00
8012	1.19(b)(3)(ii)	Each additional compact disk in the single order of § 1.19(b)(3)(i) .....	15.00
8013	1.19(b)(4)	Certified or uncertified copy of document, unless otherwise provided .....	25.00
8014	1.19(b)(5)	For assignment records, abstract of title and certification, per patent .....	25.00
8904	1.19(c)	Library service .....	50.00
8015	1.19(d)	List of U.S. patents and SIRs in subclass .....	3.00
8016	1.19(e)	Uncertified statement re status of maintenance fee payments .....	10.00
8017	1.19(f)	Copy of non-U.S. document .....	25.00
8018	1.21(c)	Disclosure document filing fee .....	10.00
8019	1.21(d)	Local delivery box rental, annually .....	50.00
8020	1.21(e)	International type search report .....	40.00
8902	1.21(g)	Self-service copy charge, per page .....	0.25
8021	1.21(h)	Recording each patent assignment, agreement or other paper, per property .....	40.00
8022	1.21(i)	Publication in <i>Official Gazette</i> .....	25.00
8023	1.21(j)	Labor charges for services, per hour or fraction thereof .....	40.00
8024	1.21(k)	Unspecified other services, excluding labor .....	AT COST
8025	1.21(l)	Retaining abandoned application .....	130.00
8026	1.21(n)	Handling fee for incomplete or improper application .....	130.00
8027	1.296	Handling fee for withdrawal of SIR .....	130.00
<b><u>Patent Enrollment Fees</u></b>			
9001	1.21(a)(1)(i)	Application fee (non-refundable) .....	40.00
9002	1.21(a)(1)(ii)	Registration examination fee .....	310.00
9003	1.21(a)(2)	Registration to practice .....	100.00
9004	1.21(a)(3)	Reinstatement to practice .....	40.00
9005	1.21(a)(4)	Copy of certificate of good standing .....	10.00
9006	1.21(a)(4)	Certificate of good standing - suitable for framing .....	20.00
9007	1.21(a)(5)	Review of decision of Director, Office of Enrollment and Discipline .....	130.00
9008	1.21(a)(6)(i)	Regrading of seven or fewer questions .....	230.00
9009	1.21(a)(6)(ii)	Regrading of eight or more questions .....	460.00
<b><u>GENERAL FEES</u></b>			
<b><u>Finance Service Fees</u></b>			
9201	1.21(b)(1) or 2.6(b)(13)(i)	Establish deposit account .....	10.00
9202	1.21(b)(2) or 2.6(b)(13)(ii)	Service charge for below minimum balance .....	25.00
9202	1.21(b)(3)	Service charge for below minimum balance restricted subscription deposit account .....	25.00
9101	1.21(m) or 2.6(b)(12)	Processing each payment refused or charged back .....	50.00
<b><u>Computer Service Fees</u></b>			
8031/8531	Computer records .....	AT COST	

**PAYMENTS FROM FOREIGN COUNTRIES MUST BE PAYABLE AND IMMEDIATELY NEGOTIABLE IN THE  
UNITED STATES FOR THE FULL AMOUNT OF THE FEE REQUIRED**

Fee Code	37 CFR	Description	Fee	Small Entity (if applicable)
<b>Patent Application Extension Fees</b>				
1251/2251	1.17(a)(1)	Extension for response within first month .....	110.00	55.00
1252/2252	1.17(a)(2)	Extension for response within second month .....	420.00	210.00
1253/2253	1.17(a)(3)	Extension for response within third month .....	950.00	475.00
1254/2254	1.17(a)(4)	Extension for response within fourth month .....	1,480.00	740.00
1255/2255	1.17(a)(5)	Extension for response within fifth month .....	2,010.00	1,005.00
<b>Patent Appeals/Interference Fees</b>				
1401/2401	1.17(b)	Notice of appeal .....	330.00	165.00
1402/2402	1.17(c)	Filing a brief in support of an appeal .....	330.00	165.00
1403/2403	1.17(d)	Request for oral hearing .....	290.00	145.00
<b>Patent Petition Fees</b>				
1460	1.17(h)	Petitions to the Commissioner, unless otherwise specified .....	130.00	
1451	1.17(j)	Petition to institute a public use proceeding .....	1,510.00	
1452/2452	1.17(l)	Petition to revive unavoidably abandoned application .....	110.00	55.00
1453/2453	1.17(m)	Petition to revive unintentionally abandoned application .....	1,330.00	665.00
1454	1.17(t)	Acceptance of an unintentionally delayed claim for priority .....	1,330.00	
1455	1.18(e)	Filing an application for patent term adjustment .....	200.00	
1456	1.18(f)	Request for reinstatement of term reduced .....	400.00	
1457	1.20(j)(1)	Extension of term of patent .....	1,120.00	
1458	1.20(j)(2)	Initial application for interim extension (see 37 CFR 1.790) .....	420.00	
1459	1.20(j)(3)	Subsequent application for interim extension (see 37 CFR 1.790) .....	220.00	
<b>PCT Fees - National Stage</b>				
1609/2609	1.492(a)(1)	IPEA - U.S. ....	730.00	365.00
1610/2610	1.492(a)(2)	ISA - U.S. ....	770.00	385.00
1611/2611	1.492(a)(3)	USPTO not ISA or IPEA .....	1,080.00	540.00
1612/2612	1.492(a)(4)	Claims meet PCT Article 33(1)-(4) - IPEA - U.S. ....	100.00	50.00
1613/2613	1.492(a)(5)	Filing with EPO or JPO search report .....	920.00	460.00
1614/2614	1.492(b)	Claims - extra independent (over three) .....	86.00	43.00
1615/2615	1.492(c)	Claims - extra total (over twenty) .....	18.00	9.00
1616/2616	1.492(d)	Claims - multiple dependent .....	290.00	145.00
1617/2617	1.492(e)	Oath or declaration after twenty or thirty months from priority date .....	130.00	65.00
1618	1.492(f)	English translation after twenty or thirty months from priority date .....	130.00	
1619		Late payment fee .....	130.00	
1620		Confirmed precautionary designation - confirmation portion .....	52.00*	
1621		Transmitting application to Intl. Bureau to act as a receiving office .....	240.00	
1624		Confirmed precautionary designation - designation portion .....	104.00*	
<b>PCT Fees - International Stage</b>				
1601	1.445(a)(1)	Transmittal fee .....	240.00	
1602	1.445(a)(2)	PCT search fee - no U.S. application .....	700.00	
1603	1.445(a)(2)	PCT search - prior U.S. application .....	450.00	
1604	1.445(a)(3)	Supplemental search per additional invention .....	210.00	
1605	1.482(a)(1)	Preliminary examination fee - ISA was the U.S. ....	490.00	
1606	1.482(a)(1)	Preliminary examination fee - ISA not the U.S. ....	750.00	
1607	1.482(a)(2)	Additional invention - ISA was the U.S. ....	140.00	
1608	1.482(a)(2)	Additional invention - ISA not the U.S. ....	270.00	
<b>PCT Fees to WIPO or EPO</b>				
1702		Basic application fee (first thirty pages) .....	476.00*	
1703		Basic supplemental fee (for each page over thirty) .....	12.00*	
1704		International search (EPO) .....	1,119.00*	
1705		Handling fee .....	172.00*	
1707		Designation fee per country .....	104.00*	
1708		International CD cases .....	4,800.00*	

\* WIPO and EPO fees subject to periodic change due to fluctuations in exchange rate. Refer to the *Official Gazette of the United States Patent and Trademark Office* for current amounts.

**UNITED STATES PATENT AND TRADEMARK OFFICE**  
**Effective October 1, 2003**

Any fee amount paid on or after October 1, 2003, must be paid in the revised amount.

The fees subject to reduction for small entities that have established status (37 CFR 1.27) are shown in a separate column.  
For additional information, please contact the General Information Services Division at (703) 308-4357 or (800) 786-9199.

<b>Fee Code</b>	<b>37 CFR</b>	<b>Description</b>	<b>Fee</b>	<b>Small Entity Fee (if applicable)</b>
<b>Patent Application Filing Fees</b>				
1001/2001	1.16(a)	Basic filing fee - Utility .....	770.00	385.00
1201/2201	1.16(b)	Independent claims in excess of three .....	86.00	43.00
1202/2202	1.16(c)	Claims in excess of twenty .....	18.00	9.00
1203/2203	1.16(d)	Multiple dependent claim .....	290.00	145.00
1051/2051	1.16(e)	Surcharge - Late filing fee or oath or declaration .....	130.00	65.00
1002/2002	1.16(f)	Design filing fee .....	340.00	170.00
1007/2007	1.16(f)	Design filing fee (CPA) .....	340.00	170.00
1003/2003	1.16(g)	Plant filing fee .....	530.00	265.00
1004/2004	1.16(h)	Reissue filing fee .....	770.00	385.00
1009/2009	1.16(h)	Reissue filing fee (CPA) .....	770.00	385.00
1204/2204	1.16(i)	Reissue independent claims over original patent .....	86.00	43.00
1205/2205	1.16(j)	Reissue claims in excess of 20 and over original patent .....	18.00	9.00
1005/2005	1.16(k)	Provisional application filing fee .....	160.00	80.00
1052/2052	1.16(l)	Surcharge - Late provisional filing fee or cover sheet .....	50.00	25.00
1053	1.17(i)	Non-English specification .....	130.00	
<b>Patent Post-Allowance Fees</b>				
1501/2501	1.18(a)	Utility issue fee .....	1,330.00	665.00
1502/2502	1.18(b)	Design issue fee .....	480.00	240.00
1503/2503	1.18(c)	Plant issue fee .....	640.00	320.00
1504	1.18(d)	Publication fee for early, voluntary, or normal publication .....	300.00	
1505	1.18(d)	Publication fee for republication.....	300.00	
<b>Patent Maintenance Fees</b>				
1551/2551	1.20(e)	Due at 3.5 years .....	910.00	455.00
1552/2552	1.20(f)	Due at 7.5 years .....	2,090.00	1,045.00
1553/2553	1.20(g)	Due at 11.5 years .....	3,220.00	1,610.00
	1.20(h)	Surcharge - Late payment within 6 months .....	130.00	65.00
1557	1.20(i)(1)	Surcharge after expiration - Late payment is unavoidable .....	700.00	
1558	1.20(i)(2)	Surcharge after expiration - Late payment is unintentional .....	1,640.00	
<b>Miscellaneous Patent Fees</b>				
1801/2801	1.17(e)	Request for continued examination (RCE) (see 37 CFR 1.114) .....	770.00	385.00
1808	1.17(i)	Processing fee, except in provisional applications .....	130.00	
1803	1.17(i)	Request for voluntary publication or republication .....	130.00	
1802	1.17(k)	Request for expedited examination of a design application .....	900.00	
1804	1.17(n)	Request for publication of SIR - Prior to examiner's action .....	920.00*	
1805	1.17(o)	Request for publication of SIR - After examiner's action .....	1,840.00*	
1806	1.17(p)	Submission of an Information Disclosure Statement .....	180.00	
1807	1.17(q)	Processing fee for provisional applications .....	50.00	
1809/2809	1.17(r)	Filing a submission after final rejection (see 37 CFR 1.129(a)) .....	770.00	385.00
1810/2810	1.17(s)	For each additional invention to be examined (see 37 CFR 1.129(b)) .....	770.00	385.00
1811	1.20(a)	Certificate of correction .....	100.00	
1812	1.20(c)(1)	Request for ex parte reexamination .....	2,520.00	
1813	1.20(c)(2)	Request for inter partes reexamination .....	8,800.00	
1814/2814	1.20(d)	Statutory disclaimer .....	110.00	55.00

\* Reduced by basic filing fee paid.

<b>Fee Code</b>	<b>37 CFR</b>	<b>Description</b>	<b>Fee</b>
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**Trademark Processing Fees**

6001/7001	2.6(a)(1)	Application for registration, per class .....	335.00
6002/7002	2.6(a)(2)	Filing an Amendment to Allege Use under § 1(c), per class .....	100.00
6003/7003	2.6(a)(3)	Filing a Statement of Use under § 1(d)(1), per class .....	100.00
6004/7004	2.6(a)(4)	Filing a Request for a Six-month Extension of Time for Filing a Statement of Use under § 1(d)(1), per class .....	150.00
6005	2.6(a)(15)	Petition to the Commissioner .....	100.00
6006	2.6(a)(19)	Dividing an application, per new application (file wrapper) created .....	100.00
6201/7201	2.6(a)(5)	Application for renewal, per class .....	400.00
6203/7203	2.6(a)(6)	Additional fee for filing renewal application during grace period, per class .....	100.00
6204	2.6(a)(21)	Correcting a deficiency in a renewal application .....	100.00
6205/7205	2.6(a)(12)	Filing § 8 affidavit, per class .....	100.00
6206/7206	2.6(a)(14)	Additional fee for filing § 8 affidavit during grace period, per class .....	100.00
6207	2.6(a)(20)	Correcting a deficiency in a § 8 affidavit .....	100.00
6208/7208	2.6(a)(13)	Filing § 15 affidavit, per class .....	200.00
6210	2.6(a)(7)	Publication of mark under § 12(c), per class .....	100.00
6211	2.6(a)(8)	Issuing new certificate of registration .....	100.00
6212	2.6(a)(9)	Certificate of correction, registrant's error .....	100.00
6213	2.6(a)(10)	Filing disclaimer to registration .....	100.00
6214	2.6(a)(11)	Filing amendment to registration .....	100.00
6401	2.6(a)(16)	Petition for cancellation, per class .....	300.00
6402	2.6(a)(17)	Notice of opposition, per class .....	300.00
6403	2.6(a)(18)	Ex parte appeal, per class .....	100.00

The 7000 series fee code (e.g., 7001, 7002, etc.) is used for electronic filings via e-TEAS, which is available at [www.uspto.gov/teas](http://www.uspto.gov/teas).

**Trademark Service Fees**

8501	2.6(b)(1)	Printed copy of registered mark, delivery by USPS, USPTO Box, or electronic means .....	3.00
8503	2.6(b)(4)(i)	Certified copy of registered mark, with title and/or status, regular service .....	15.00
8504	2.6(b)(4)(ii)	Certified copy of registered mark, with title and/or status, expedited local service .....	30.00
8507	2.6(b)(2)	Certified copy of trademark application as filed .....	15.00
8508	2.6(b)(3)	Certified or uncertified copy of trademark-related file wrapper and contents .....	50.00
8513	2.6(b)(5)	Certified or uncertified copy of trademark document, unless otherwise provided .....	25.00
8514	2.6(b)(7)	For assignment records, abstracts of title and certification per registration .....	25.00
8902	2.6(b)(9)	Self-service copy charge, per page .....	0.25
8521	2.6(b)(6)	Recording trademark assignment, agreement or other paper, first mark per document .....	40.00
8522	2.6(b)(6)	For second and subsequent marks in the same document .....	25.00
8523	2.6(b)(10)	Labor charges for services, per hour or fraction thereof .....	40.00
8524	2.6(b)(11)	Unspecified other services, excluding labor .....	AT COST

**Fastener Quality Act Fees**

6991	2.7(a)	Recordal application fee .....	20.00
6992	2.7(b)	Renewal application fee .....	20.00
6993	2.7(c)	Late fee for renewal application .....	20.00

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